

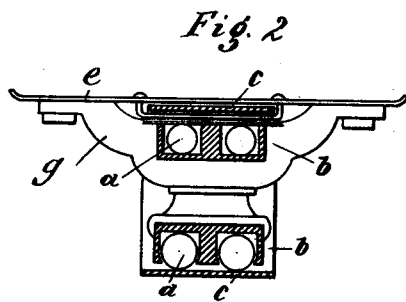
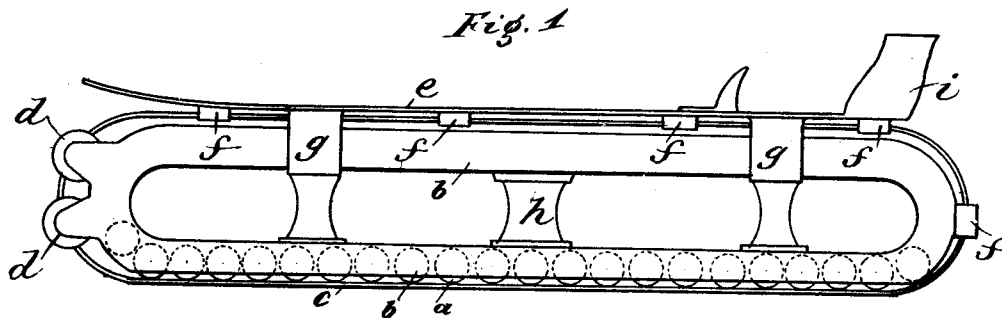
No. 675,824.

Patented June 4, 1901.

C. FOHR.  
ROLLER SKATE.

(Application filed Nov. 21, 1900.)

(No Model.)



Witnesses:  
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# UNITED STATES PATENT OFFICE.

CARL FOHR, OF SCHLOSS WALLENBURG, GERMANY.

## ROLLER-SKATE.

SPECIFICATION forming part of Letters Patent No. 675,824, dated June 4, 1901.

Application filed November 21, 1900. Serial No. 37,247. (No model.)

*To all whom it may concern:*

Be it known that I, CARL FOHR, a subject of the King of Bavaria, residing at Schloss Wallenburg, near Miesbach, in the Kingdom of Bavaria, German Empire, have invented certain new and useful Improvements in Roller-Skates, of which the following is a full, clear, and exact description.

My invention relates to an improvement in roller-skates.

The principal object of my invention is to provide a roller-skate which will be applicable for use on rough skating-ground.

With this object in view and some others which will be obvious to those skilled in the art my invention consists in the features, details of construction, and combination of parts, which will first be described in connection with the accompanying drawings and then particularly pointed out in the claims.

In the drawings, Figure 1 is a side elevation of a skate embodying my invention; Fig. 2, a transverse section of such a skate in which a double ball-channel is employed.

Referring to the drawings, *b* is a tubular carrier having the shape of a link—that is to say, the said carrier has an upper and a lower straight portion and two curved and preferably semicircular end portions each connecting the corresponding ends of the straight portions. The carrier *b* has the underneath side of the tube forming its lower horizontal portion cut away, as shown in the drawings, for a purpose hereinafter described. The interior of the tubular carrier *b* serves as a channel or raceway, in which is located a series of antifriction devices—for example, the antifriction-balls *a*—which are free to travel around the circuit of the ball-channel and which when they reach the lower portion of the carrier *b* (whose underneath part is cut away, as has been previously described) will project beyond the carrier. These projecting portions of the antifriction devices rest upon the horizontal portion of an endless apron or belt *c*, which contacts with the skating-surface. This apron *c* is preferably in the form of an endless metallic strip passing entirely around the carrier *b*. In order to hold this apron *c* against lateral displacement, while at the same time permitting it to move longitudinally, suitable guide de-

vices are provided—as, for example, the pair of antifriction-rollers *d*, Fig. 1, mounted in lugs secured to the front end of the carrier *b*, and the eyes or staples *f*, one secured to the rear end of the carrier *b*, and a plurality attached to the under surface of a foot-plate *e*, which is fixed upon pedestals *g*, mounted upon the carrier *b* and serving to strengthen the same. The carrier is also provided with a central cross-bar *h* in order to still further strengthen it. The foot-plate is shown as provided with a counter *i* and is intended to be secured to the foot of the skater by any suitable means. (Not shown.)

The operation of the device is as follows: When the skater strikes out with his foot in skating, the push given to the leading foot causes the balls to roll backward along the apron, thus causing all the balls to circulate in the orbit formed by the ball-channel in the usual way of such devices. The friction of the apron on the skating-surface, caused by the weight of the skater, results in the apron moving so as to always present a further surface for the balls to travel over. In this way the apron forms a track for the antifriction devices to roll over, thereby avoiding to a large extent the disadvantages arising from a rough skating-surface.

It is obvious that the carrier may have a plurality of sets of antifriction devices, if so desired. For example, Fig. 2 shows a skate in which two sets of balls and their raceways are provided. Such a skate gives a broader bearing-surface for the skater, while at the same time giving an opportunity for “edge-skating,” which would not be the case if wide antifriction devices were employed. In other words, with two sets of balls the skater may execute the usual fancy evolutions which are done on ice-skates by using either the inside edge or the outside edge of the skate.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a roller-skate, the combination, with a tubular carrier having its lower portion cut away, a series of separate antifriction devices located and movable in a circuit within the tubular carrier and arranged to project through the cut-away portion when opposite the same, and a foot-plate supported by said

carrier, of an integral flexible apron movably mounted so as to pass between the skating-surface and those antifriction devices which project from the carrier.

5 2. In a roller-skate, the combination, with a carrier having a pair of raceways arranged side by side in close juxtaposition, of separate antifriction devices located and orbitally movable in said raceways, a foot-plate supported by said carrier, and an integral flexible traveling apron, arranged to contact with the skating-surface and to form a track for the antifriction devices.

10 3. In a roller-skate, the combination, with a link-shaped tubular carrier, having a por-

tion cut away, and a series of antifriction-balls orbitally movable therein and projecting through the cut-away portion when they come opposite the same, of an integral flexible endless apron movably mounted in guide 20 devices surrounding the carrier, and contacting with those balls projecting through the cut-away portion of the carrier, and a foot-plate supported by said carrier.

In witness whereof I have hereunto set my 25 hand in presence of two witnesses.

CARL FOHR.

Witnesses:

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